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IN THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

1. – 27. (Canceled)

28. (Currently Amended) An outboard motor comprising:

a powerhead having a combustion engine, a midsection configured for mounting the outboard motor to a watercraft, and a lower unit powered by the engine to propel a watercraft;

at least one combustion condition monitor to monitor at least one cylinder of the combustion engine; [[and]]

the combustion condition monitor being configured to determine an oxygen concentration in the at least one cylinder during a next combustion cycle; and

an ECU to receive feedback from the combustion condition monitor and configured to adjust an operating parameter in [[a]] the next combustion cycle if the feedback from the combustion condition monitor is indicative of atypical combustion.

29. (Canceled)

30. (Currently Amended) The outboard motor of claim [[29]] 28 wherein the ECU is configured to deliver an over-fueling quantity of fuel in the next combustion cycle if the oxygen concentration in the next combustion cycle is higher than expected.

31. (Currently Amended) The outboard motor of claim [[29]] 28 wherein the ECU is configured to deliver an under-fueling quantity of fuel in the next combustion cycle if the oxygen concentration in the next combustion cycle is lower than expected.

32. (Original) The outboard motor of claim 28 wherein the atypical combustion is detected by monitoring at least one of a conductivity within the at least one cylinder, a variation in crankshaft velocity, and a variation in exhaust gas temperature.

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33. (Original) The outboard motor of claim 28 wherein the operating parameter adjusted is a fuel quantity of the at least one cylinder.

34. (Original) The outboard motor of claim 28 wherein the operating parameter adjusted is a fuel quantity of another cylinder of the combustion engine.

35. - 40. (Canceled)